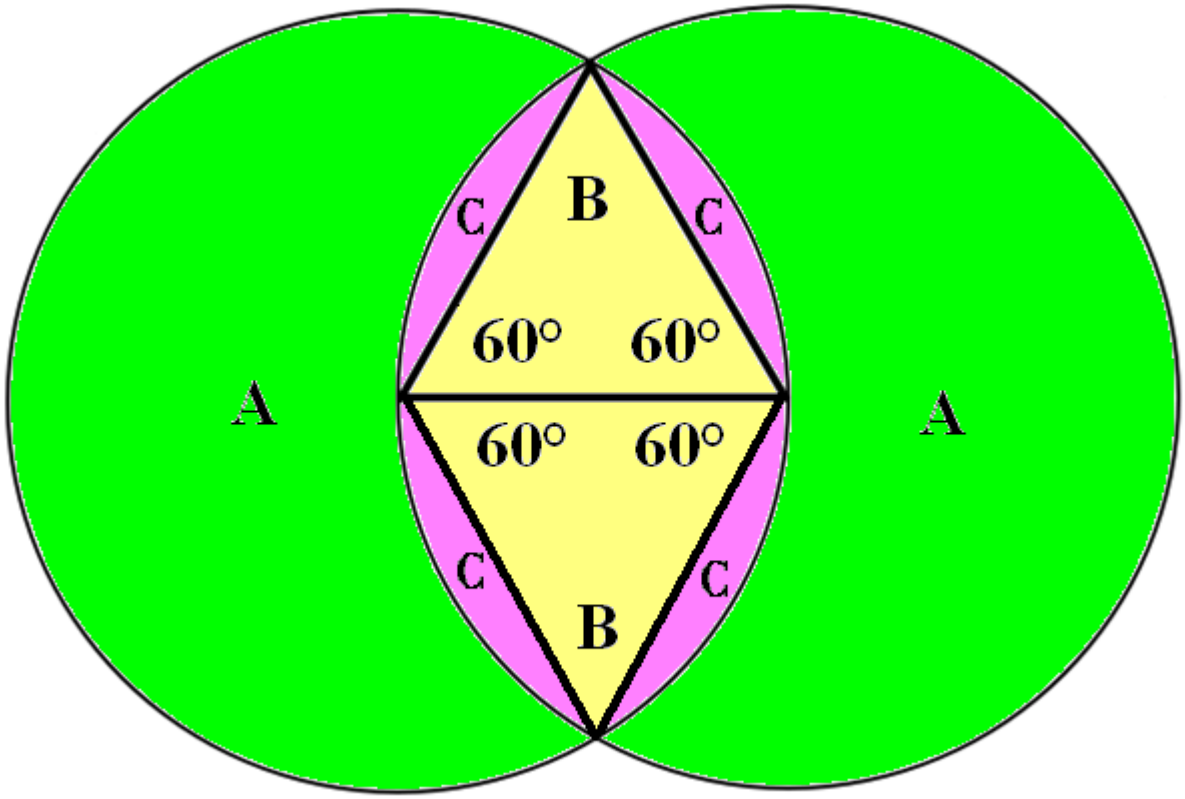
Figure for Exercise 02.3



In this drawing the radii of the two circles are assumed to be **1.** Let ***a***, ***b***, ***c*** denote the areas of the regions labeled **A, B, C** respectively**.** Then we can compute ***b*** since it is the area of an equilateral triangle whose sides have length **1,** we can compute ***b + c*** because it is the area of a **60** degree circular sector with radius **1,** and we can compute ***a + 2b + 4c*** because it is the area of a circle of radius **1.** Use these equations to find ***a*.**